

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE CONVERSION OF THE EXISTING INTERSECTION CONTROL BEACON (ICB) TO A FULLY ACTUATED TRAFFIC SIGNAL AT THE INTERSECTION OF MD 32 AT KATE WAGNER ROAD IN CARROLL COUNTY. MD 32 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

A CONTROLLER WILL BE INSTALLED IN THE EXISTING BASE MOUNTED CABINET AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 32. THE MD 32 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE KATE WAGNER ROAD MOVEMENTS WILL OPERATE CONCURRENTLY.

SPECIAL NOTES

1. THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140
MR. JOHN HUCHROWSKI, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 624-8200
MS. SUE PALMER, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 624-8105
MS. ANDREA ABEND, UTILITY ENGINEER
PHONE: (301) 624-8115
MR. ROBERT SNYDER, ASST. DIVISION CHIEF - TRAFFIC OPERATIONS
PHONE: (410) 787-7631
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS
PHONE: (410) 787-7652

2. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP.
CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.

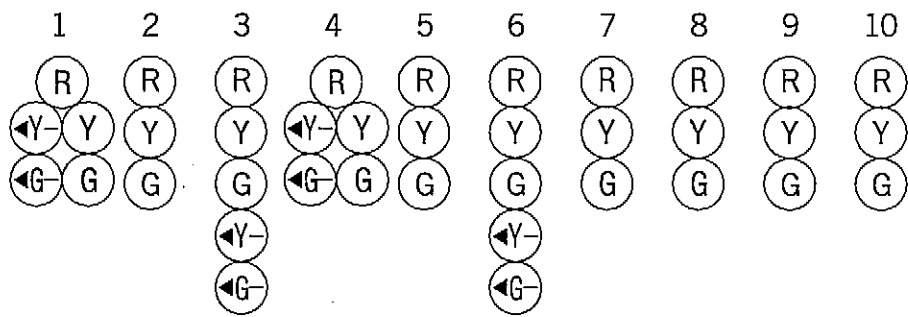
3. THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7631 TO ARRANGE FOR THE PHONE DROP INSTALLATION.
THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER.

EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

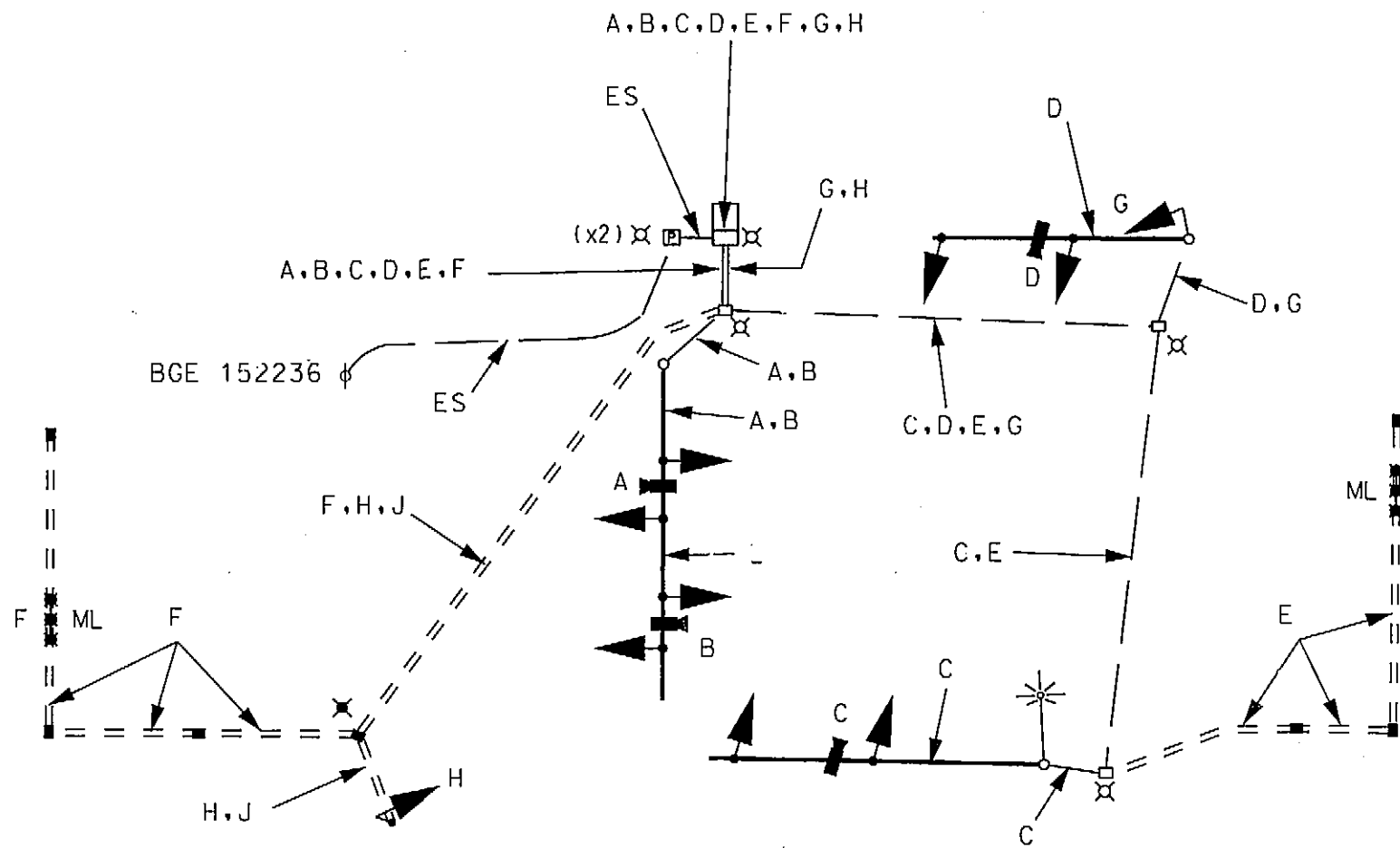
QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
1	EA	14 FT. STEEL PEDESTAL POLE ON BREAK AWAY TRANSFORMER BASE
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, WITH CONFLICT MONITOR, VIDEO DETECTION INTERFACE, ONE(1) FOUR-CHANNEL LOOP DETECTOR AMPLIFIER, AND ALL NECESSARY HARNESSSES AND EQUIPMENT FOR FULL TRAFFIC OPERATION [Note: CONTROLLER SHALL BE PURCHASED FROM ECONOLITE AND DELIVERED TO THE S.H.A. SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650]
4	EA	VIDEO DETECTOR CAMERA (TERRA)
550	LF	VIDEO DETECTOR CAMERA CABLE
2	EA	NON-INVASIVE PROBE (SET OF 3) WITH 1000 FT. LEAD-IN CABLE
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST
2	EA	12 IN. 5-SECTION LED SIGNAL HEAD - MAST
2	EA	12 IN. 5-SECTION LED SIGNAL HEAD - SIDE POLE
2	EA	48 IN. x 48 IN. W3-3 "NEW" SIGN - GROUND
2	EA	60 IN. x 12 IN. D-3(2) SIGN - GROUND
2	EA	72 IN. x 24 IN. D3-2(1) SIGN - GROUND
0.5	CY	TEST PIT EXCAVATION
7	EA	HANDHOLE
250	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
125	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
560	LF	3' IN. VC CONDUIT [SCHEDULE 80] - TRENCHED
110	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - BORED
20	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
70	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - BORED
0.7	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
1	EA	GROUND ROD - 3/4 IN. x 10 FT. LENGTH
70	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE
128	LF	4 IN. x 6 IN. WOOD SIGN SUPPORTS
2	EA	REMOVE EXISTING GROUND MOUNTED SIGN
LUMP SUM	LS	REMOVE EXISTING SIGNAL EQUIPMENT
20	UD	PCMS (Portable Changeable Message Sign)

Phase Chart



PHASE 1 AND 5	←GR	R	←GR	←GR	R	←GR	R	R	R	R	
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6											
PHASE 1 AND 6	←GG	G	←GG	R	R	R	R	R	R	R	
1 CHANGE	←YG	G	←YG	R	R	R	R	R	R	R	
PHASE 2 AND 5	R	R	R	←GG	G	←GG	R	R	R	R	
5 CHANGE	R	R	R	←YG	G	←YG	R	R	R	R	
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	
4 AND 8 CHANGE	R	R	R	R	R	R	G	G	G	G	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

Wiring Diagram



- KEY
- A, B, C, D VIDEO DETECTOR CABLE
 - E, F NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
 - G, H 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - J BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
 - X EXISTING GROUNDING ROD
 - X PROPOSED GROUNDING ROD
 - ML MICRO-LOOP DETECTOR (NON-INVASIVE)
 - ES EXISTING ELECTRICAL SERVICE

Note: New signal heads not labeled are to utilize existing 7-conductor cable

MD-AMD Tracking No.: 11APCL008

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 32 (Washington Rd) at KATE WAGNER ROAD

WESTMINSTER, MD

GENERAL INFORMATION PLAN

SCALE N/A DATE October 3, 2012 CONTRACT NO. BW996M82

DESIGNED BY J. Dimdorfer /TTG CO. JNTY CARROLL
DRAWN BY J. Dimdorfer /TTG LOGMILE 06003214.97
CHECKED BY [Signature] TMS NO. L-30
F.A.P. NO. N/A TOD NO. N/A

TS NO. 4697A- DRAWING SG - 02 OF 02 SHEET NO. 2 OF 3

PLOTTED: Wednesday, October 03, 2012 AT 09:48 AM
FILE: F:\2007\2007-0101\Des\TIEDU\Full Traffic Signal MD32 C\STATEWAGNER.dgn



The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600
1-800-583-8411
Fax 410-931-6601

"Merging Innovation and Excellence"®



Professional Certification. I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineering under the laws of the State of Maryland.

License No: 33316 Expiration Date 7/13/14